#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022985 Address: 333 Burma Road **Date Inspected:** 04-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes N/A No

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for random observations relative to the work being performed.

Bay 14

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Wong Xiang Pin, CWI Wang Jun.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 14 W PCMK: SEG3020BB

Weld No: 047 Welder: 067829

WPS-B-P-2214-TC-U4b-FCM-1

Components; OBG 14 W - DP3184 to EP3029A FIT UP

PCMK:SEG3020\* - (see photo below)

Weld No: 001,012,013

Welder: 048694 WPS-B-P-2212



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Components; OBG

PCMK: Deck Plate to Floor Beam

Weld No: fit up

Welder: 066678, 066674, 067611, 066398

WPS-B-P-2212

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Wong Xiang Pin, CWI Wang Jun.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector.

Components; OBG 13BW PCMK: SA3231C-001 Weld No: 006,084 Welder: 201583

Weld Repair No. B-WR20442

WPS-345-FCAW-3G(3F)-ESAB-Repair -1

Heat straightening of PCMK, SEG3020BB-029,038,020 under approved Heat Straightening procedure, HSR1 (B)-10256. The in process temperature was observed as 420°C. The ZPMC QC was identified as Wong Xiang Pin. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 4mm. (see photo below)

Heat straightening of PCMK, SEG3020BB-025 under approved Heat Straightening procedure, HSR1 (B)-10245. The in process temperature was observed as 420°C. The ZPMC QC was identified as Wong Xiang Pin. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 5mm.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

"No relevant conversations."

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 1500026784, who represents the Office of Structural Materials for your project.

Inspected By:	Leavitt,Kelly	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer